CHEMICAL PRODUCT AND COMPANY INFORMATION

REVISION DATE: 04/03/1995

UN NUMBER- UN1993

PRIMARY APPLICATION- WINDSHIELD WASHER FLUID

MANUFACTURER- SUN COMPANY, INC.

TEN PENN CENTER

1801 MARKET STREET

PHILADELPHIA PA 19103-1699

SYNONYMS....: WINDSHIELD WASHER PREMIX

CAS REGISTRY NO: SEE SEC. 2

CAS NAME.....: NO CLASSIFICATION - MIXTURE

CHEMICAL FAMILY: BLEND

INFORMATION

SUPPLIER... MARIA DAYRIT PHONE....: (215) 246-8201

EMERGENCY PHONE NUMBERS (AFTER NORMAL BUSINESS HOURS)

SUN CO.. 1-800-964-8861 CHEMTREC. 1-800-424-9300

2. COMPOSITION / INFORMATION ON INGREDIENTS

EXPOSURE GUIDELINES

OSHA ACGIH SUN/MFR LO% HI% TWA STEL TWA STEL TWA STEL UNIT COMPONENT/CAS NO. -----

LIMITS FOR THE PRODUCT:

NO SPECIFIC LIMIT

METHYL ALCOHOL 67-56-1 35.00 45.00 200 250 250 200

PPM

WATER

7732-18-5 55.00 65.00

NO SPECIFIC LIMIT

C.I. ACID BLUE 9

.00 1.00 3844-45-9

NO SPECIFIC LIMIT

ADDITIONAL EXPOSURE LIMITS ------ GOVERNMENT REGULATION OTHER LIMIT- SEE SECTION 2

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW -----

DANGER! FLAMMABLE LIQUID AND VAPOR. HARMFUL IF INHALED. HIGH VAPOR CONCENTRATIONS MAY CAUSE DIZZINESS. MAY CAUSE SKIN IRRITATION. CAUSES EYE IRRITATION. POISON! MAY BE FATAL OR CAUSE BLINDNESS IF SWALLOWED. MAY CAUSE SEVERE CHRONIC TOXICITY.

APPEARANCE -- CLEAR BLUE LIQUID ODOR -- MILD ALCOHOL ODOR

POTENTIAL HEALTH EFFECTS -----

PRIMARY ROUTES OF ENTRY- INHALATION(X) SKIN(X) EYE(X) INGESTION(X)

INHALATION ------EXCESSIVE EXPOSURES MAY CAUSE IRRITATION TO EYES, NOSE, THROAT, LUNGS; RESPIRATORY TRACT; CENTRAL NERVOUS SYSTEM (BRAIN) EFFECTS; HEADACHES, NAUSEA; DIZZINESS, LOSS OF BALANCE AND COORDINATION; UNCONSCIOUSNESS, COMA; RESPIRATORY FAILURE AND DEATH. REPEATED EXCESSIVE EXPOSURES MAY

CAUSE LIVER EFFECTS OR DAMAGE. KIDNEY EFFECTS OR DAMAGE.

SKIN -----

SKIN ABSORPTION OF MATERIAL MAY PRODUCE SYSTEMIC TOXICITY. MAY CAUSE MODERATE IRRITATION WITH PROLONGED OR REPEATED CONTACT. REMOVES NATURAL OILS & FATS FROM SKIN.

EXE -----

CONTACT WITH THE EYE MAY CAUSE MODERATE IRRITATION. CORNEAL DAMAGE OR OPACITY.

INGESTION -------

HARMFUL OR FATAL IF SWALLOWED. CANNOT BE MADE NON-POISONOUS. INGESTION OF THIS MATERIAL MAY CAUSE BLINDNESS; CENTRAL NERVOUS SYSTEM (BRAIN) EFFECTS; NAUSEA, VOMITING AND DIARRHEA; INGESTION OF THIS MATERIAL MAY CAUSE DAMAGE TO CENTRAL NERVOUS SYSTEM (BRAIN); VISION; LIVER; KIDNEYS;

CARCINOGEN LISTED BY-IARC(NO) NTP(NO) OSHA(NO) ACGIH(NO) OTHER(NO)

PRE-EXISTING MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE-DISORDERS OR DISEASES OF THE SKIN, EYE, LIVER, KIDNEY, RESPIRATORY, PULMONARY AND LUNG (E.G. ASTHMA-LIKE CONDITIONS).

I. FIRST AID MEASURES

SKIN -----

WASH WITH SOAP AND WATER UNTIL NO ODOR REMAINS. IF REDNESS OR SWELLING DEVELOPS, OBTAIN MEDICAL ASSISTANCE. IMMEDIATELY REMOVE SOAKED CLOTHING. WASH CLOTHING BEFORE REUSE. DESTROY CONTAMINATED SHOES.

EYE

FLUSH WITH WATER FOR AT LEAST 15 MINUTES. OBTAIN MEDICAL ASSISTANCE.

INGESTION ------

GIVE LIQUIDS AND INDUCE VOMITING UNLESS VICTIM IS UNCONSCIOUS. IF INDIVIDUAL IS CONSCIOUS, GIVE MILK OR WATER TO DILUTE. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. IF VICTIM IS CONSCIOUS AND ALERT VOMITING SHOULD BE INDUCED BY OR UNDER THE DIRECTION OF A PHYSICIAN OR POISON CONTROL CENTER. OBTAIN EMERGENCY MEDICAL ATTENTION.

5. FIRE FIGHTING MEASURES

FLASH POINT: 98 (DEG. F); 36 (DEG. C)
AUTOIGNITION TEMP.: NOT DETERMINED (DEG. F); NOT DETERMINED (DEG. C)

---FLAMMABLE LIMITS IN AIR---

LOWER EXPLOSIVE LIMIT (LEL): NOT DETERMINED % VOLUME UPPER EXPLOSIVE LIMIT (UEL): NOT DETERMINED % VOLUME

FIRE AND EXPLOSION HAZARDS ------FLAMMABLE LIQUID (FLASH POINT LESS THAN 100F)

SPECIAL FIRE FIGHTING INSTRUCTIONS ------USE WATER SPRAY. COOL TANK/ CONTAINER. WEAR SELF-CONTAINED BREATHING APPARATUS. WEAR STRUCTURAL FIREFIGHTERS PROTECTIVE CLOTHING.

NFPA/HMIS CLASSIFICATION
HEALTH - 1 / 1
FIRE - 2 / 2
REACTIVITY - 0 / 0
PERSONAL PROTECTION INDEX - X

HAZARD RATING
0=LEAST 1=SLIGHT
2=MODERATE 3=HIGH
4=EXTREME

SPECIFIC HAZARD: FLAMMABLE

6. ACCIDENTAL RELEASE MEASURES

PREVENT IGNITION; STOP LEAK; VENTILATE AREA. CONTAIN SPILL. USE WATER SPRAY TO DISPERSE VAPORS. KEEP UPWIND OF LEAK. USE PERSONAL PROTECTIVE EQUIPMENT STATED IN SECTION 8. ADVISE EPA; STATE AGENCY IF REQUIRED. ABSORB ON INERT MATERIAL. SHOVEL, SWEEP OR VACUUM SPILL.

7. HANDLING AND STORAGE

KEEP AWAY FROM HEAT, SPARKS AND FLAME. KEEP IN COOL, DRY PLACE. KEEP CONTAINER TIGHTLY CLOSED. KEEP IN WELL VENTILATED SPACE. STORAGE HAS TEMPERATURE LIMITS--SEE STABILITY. NFPA CLASS 1C STORAGE. CONSULT NFPA AND OSHA CODES. TRANSFER OPERATIONS MUST BE ELECTRICALLY GROUNDED TO DISSIPATE STATIC BUILDUP. AVOID PROLONGED BREATHING OF MIST OR VAPOR. AVOID CONTACT WITH THIS MATERIAL. AVOID CONTACT WITH EYES. WASH THOROUGHLY AFTER HANDLING. NEVER SIPHON BY MOUTH.

3. EXPOSURE CONTROL / PERSONAL PROTECTION

CONSULT WITH A HEALTH/SAFETY PROFESSIONAL FOR SPECIFIC SELECTION.

VENTILATION ------USE ONLY WITH ADEQUATE VENTILATION. VENTILATE AS NEEDED TO COMPLY WITH EXPOSURE LIMIT. EXPLOSION PROOF VENTILATION EQUIPMENT REQUIRED.

PERSONAL PROTECTIVE EOUIPMENT ------EYE ------

SPLASH PROOF CHEMICAL GOGGLES OR FULL FACE SHIELD RECOMMENDED TO PROTECT AGAINST SPLASH OF PRODUCT.

GLOVES -----

PROTECTIVE GLOVES RECOMMENDED WHEN PROLONGED SKIN CONTACT CANNOT BE AVOIDED. THE FOLLOWING GLOVE MATERIALS ARE ACCEPTABLE: POLYETHYLENE: NEOPRENE; NITRILE; POLYVINYL ALCOHOL; VITON; NATURAL RUBBER;

RESPIRATOR -----

CONCENTRATION-IN-AIR DETERMINES PROTECTION NEEDED. USE ONLY NIOSH CERTIFIED RESPIRATORY PROTECTION. HALF-MASK AIR PURIFYING RESPIRATOR WITH ORGANIC VAPOR CARTRIDGES IS ACCEPTABLE TO 10 TIMES THE EXPOSURE LIMIT. FULL-FACE AIR PURIFYING RESPIRATOR WITH ORGANIC VAPOR CARTRIDGES IS ACCEPTABLE TO 50 TIMES THE EXPOSURE LIMIT NOT TO EXCEED THE CARTRIDGE LIMIT OF 1000 PPM. PROTECTION BY AIR PURIFYING RESPIRATORS IS LIMITED. USE A POSITIVE PRESSURE-DEMAND FULL-FACE SUPPLIED AIR RESPIRATOR OR SCBA FOR EXPOSURES ABOVE 50X THE EXPOSURE LIMIT. IF EXPOSURE IS ABOVE IDLH (IMMEDIATELY DANGEROUS TO LIFE & HEALTH) OR THERE IS THE POSSIBILITY OF AN UNCONTROLLED RELEASE OR EXPOSURE LEVELS ARE UNKNOWN THEN USE A POSITIVE PRESSURE-DEMAND FULL-FACE SUPPLIED AIR RESPIRATOR WITH ESCAPE BOTTLE OR SCBA.

OTHER -----

IF CONTACT IS UNAVOIDABLE, WEAR CHEMICAL RESISTANT CLOTHING. THE FOLLOWING MATERIALS ARE ACCEPTABLE AS PROTECTIVE CLOTHING MATERIALS: POLYETHYLENE; POLYVINYL ALCOHOL (PVA); NEOPRENE; NITRILE; VITON; SAFETY SHOWER AND EYE WASH AVAILABILITY RECOMMENDED. LAUNDER SOILED CLOTHES. FOR NON-FIRE EMERGENCIES, POSITIVE PRESSURE SELF-CONTAINED BREATHING APPARATUS (SCBA) & STRUCTURAL FIREFIGHTERS' PROTECTIVE CLOTHING WILL PROVIDE LIMITED PROTECTION.

. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT....: 148 (DEG. F) 64 (DEG. C)
MELTING POINT....: N.D. (DEG. F) N.D. (DEG. C)
SPECIFIC GRAVITY...: 0.97 (WATER=1)
PACKING DENSITY...: N/A (KG/M3)

VAPOR PRESSURE.....: 97.68 (MM HG @ 20 DEG C)

VAPOR DENSITY.....: N/A (AIR=1)

SOLUBILITY IN WATER.: 100% (% BY VOLUME)

PH INFORMATION....: N.D. AT CONC. N.D. G/L H2O

% VOLATILES BY VOL..: N/A

EVAPORATION RATE....: N/A (ETHYL ETHER=1)

OCTANOL/WATER COEFF.: N.D.

APPEARANCE..... CLEAR BLUE LIQUID

ODOR..... MILD ALCOHOL ODOR

ODOR THRESHOLD.....: N.D. (PPM)

VISCOSITY....... N.D. SUS @ N.D DEG F ... N.D. CST @ N.D DEG C

MOLECULAR WEIGHT....: N.D. (G/MOLE)

10. STABILITY AND REACTIVITY

STABILITY -----

STABLE.

CONDITIONS TO AVOID-

HEAT, SPARKS AND OPEN FLAMES. STORE AT TEMPERATURES BELOW 120 DEG F.

INCOMPATIBLE MATERIALS -----

STRONG OXIDIZERS

HAZARDOUS DECOMPOSITION ------

COMBUSTION WILL PRODUCE CARBON MONOXIDE AND ASPHYXIANTS

POLYMERIZATION -----

WILL NOT OCCUR.

11. TOXICOLOGICAL INFORMATION

. TOXICOLOGICAL INFORMATION

FOR THE PRODUCT -----INHALATION/ORAL: POISON! CANNOT BE MADE NON-POISONOUS. HARMFUL/FATAL
IF INHALED OR SWALLOWED. EFFECTS MAY BE DELAYED. OVEREXPOSURE MAY
CAUSE EYE & RESPIRATORY IRRITATION, HEADACHE, NAUSEA, VOMITING, VISUAL
IMPAIRMENT, CONFUSION, RESPIRATORY FAILURE, COMA & DEATH. IF SWALLOWED
CAN CAUSE BLINDNESS, SEVERE GASTROINTESTINAL TRACT IRRITATION, CNS
(BRAIN) EFFECTS. MASSIVE OVERDOSE MAY CAUSE HEART, LIVER, KIDNEY,
BRAIN EFFECTS/DAMAGE. SKIN: CAN BE ABSORBED. PROLONGED OR REPEATED
CONTACT MAY CAUSE MODERATE IRRITATION, NUMBNESS, REDNESS, DERMATITIS.
EYE: IRRITANT. CAN CAUSE PAIN, SWELLING, DOUBLE VISION, CORNEAL INJURY
AND PERMANENT BLINDNESS.

METHYL ALCOHOL (COMPONENT)
INHALATION/ORAL: POISON! CANNOT BE MADE NON-POISONOUS. HARMFUL/FATAL
IF INHALED OR SWALLOWED. EFFECTS MAY BE DELAYED. OVEREXPOSURE MAY
CAUSE EYE & RESPIRATORY IRRITATION, HEADACHE, NAUSEA, VOMITING, VISUAL
IMPAIRMENT, CONFUSION, RESPIRATORY FAILURE, COMA & DEATH. LC50 (RAT)
4HR:64000 PPM. IF SWALLOWED, MAY CAUSE BLINDNESS, SEVERE GI IRRITATION
CNS (BRAIN) EFFECTS. MASSIVE OVERDOSE MAY CAUSE HEART, LIVER, KIDNEY,
BRAIN EFFECTS/DAMAGE. SKIN: CAN BE ABSORBED. PROLONGED OR REPEATED
CONTACT MAY CAUSE MODERATE IRRITATION, NUMBNESS, REDNESS, DERMATITIS.
EYE: IRRITANT. CAN CAUSE PAIN, SWELLING, DOUBLE VISION, CORNEAL INJURY
AND PERMANENT BLINDNESS.

WATER (COMPONENT)
INHALATION: NON-TOXIC UNDER USUAL CIRCUMSTANCES. ENTRY OF WATER INTO
THE LUNGS EXCLUDES OXYGEN AND ACTS AS AN ASPHYXIANT, AND CAN CAUSE
DEATH (DROWNING). SKIN: MINIMAL IRRITATION WITH PROLONGED OR REPEATED
CONTACT. WHEN HEATED, MAY CAUSE THERMAL BURNS TO SKIN AND EYE. ORAL:
NON-TOXIC.

C.I. ACID BLUE 9 (COMPONENT)
NO DATA AVAILABLE FOR ANY ROUTE OF EXPOSURE.

12. ECOLOGICAL INFORMATION

AOUATIC TOXICITY -----

NO DATA AVAILABLE.

13. DISPOSAL CONSIDERATIONS

FOLLOW FEDERAL, STATE AND LOCAL REGULATIONS. RCRA HAZARDOUS WASTE. DO NOT FLUSH TO DRAIN/ STORM SEWER. CONTRACT TO AUTHORIZED DISPOSAL

14. TRANSPORTATION INFORMATION

DOT-

PROPER SHIPPING NAME- FLAMMABLE LIQUID, N.O.S. (CONTAINS METHANOL) HAZARD CLASS- 3 (FLAMMABLE LIQUID)

IDENTIFICATION NUMBER- UN1993

LABEL REQUIRED- PG II, FLAMMABLE LIQUID

IMDG- PROPER SHIPPING NAME- NO DATA AVAILABLE

IATA- PROPER SHIPPING NAME- NO DATA AVAILABLE

15. REGULATORY INFORMATION

SARA 302 THRESHOLD PLANNING QUANTITY. N/A

SARA 304 REPORTABLE QUANTITY 11111 POUNDS

SARA 311 CATEGORIES- IMMEDIATE (ACUTE) HEALTH EFFECTS.. Y

DELAYED (CHRONIC) HEALTH EFFECTS...

FIRE HAZARD Y SUDDEN RELEASE OF PRESSURE HAZARD. N

REACTIVITY HAZARD N

WHEN A PRODUCT AND/OR COMPONENT IS LISTED BELOW, THE REGULATORY LIST ON WHICH IT APPEARS IS INDICATED.

METHYL ALCOHOL - CT MA NJ PA RI WV 01 07

01=SARA 313 02=SARA 302/304 04=OSHA CARCINOGEN 05=ACGIH CARCINOGEN 07=CERCLA 302.4 08=WHMIS CONTROLLED PROD. 10=OTHER CARCINOGEN

> NJ=NEW JERSEY RTK MI=MICHIGAN 406 RI=RHODE ISLAND

CA=CALIFORNIA PROP 65 MN=MINNESOTA RTK

03=IARC CARCINOGEN

06=NTP CARCINGEN

IL=ILLINOIS CT=CONNECTICUT

FL=FLORIDA NY=NEW YORK

PA=PENNSYLVANIA RTK

MA=MASSACHUSETTS RTK

WV=WEST VIRGINIA

LA=LOUISIANA

ME=MAINE

OH=OHIO

THIS PRODUCT OR ALL COMPONENTS OF THIS PRODUCT ARE LISTED ON THE U.S. TSCA INVENTORY.

16. OTHER INFORMATION

NONE